Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

if two kinds exist, are injured or that internal processes may lead to the production of more functional sperm of one sex. These factors may differ in different individuals or be characteristic of different races or regions. The importance of settling this question and the ease with which the experiment can be carried out with the simplest possible apparatus ought to lead many naturalists to repeat the experiment in different localities and with different species. The only difficulty arises from the mortality of the tadpoles; for they must be kept until the time of metamorphosis (which, however, for the wood frog, the toad and for some of the tree frogs takes place as early as June of the same year). By keeping the tadpoles in running water, or by changing the water in the dishes every day, success is assured.

M.

ANATOMY

Wiedersheim's Comparative Anatomy.[1] The various forms and editions of this work have been for two decades, we believe, the most used and useful text-books upon the comparative anatomy of vertebrates. In the ten years since the publication of the second English edition, three progressively larger German editions have appeared, and the book became so large that Wiedersheim published a résumé entitled "An Introduction to Comparative Anatomy." The third English edition is, in both size and substance, a compromise between the second English and the large German editions. The text proper occupies one hundred and ten pages more than in the second edition. This is due partly to the addition of new matter and partly to the use of uniform type in the text, instead of printing in smaller type the matter assumed to be less worthy of the student's attention. This change has improved the appearance of the book and the increase in size has been partly counterbalanced by printing more compactly and in smaller type the much extended and useful bibliography.

New facts have been incorporated, usually and unfortunately without recasting, but the sections upon the skin, skull, brainmembranes and "adrenals" have been essentially rewritten. As a result, the book is improved by many small increments as well as by the new treatment of a few subjects.

---

[1] Comparative Anatomy of Vertebrates. Adapted from the German of Dr. R. Wiedersheim, by W. N. Parker. Third edition, founded on the sixth German edition. 576 pp., 372 figures. The Macmillan Company, 1907.

Among these is the interesting physiological difference between the lungs of birds and of mammals, now properly noted for the first time. In mammals during inspiration the lung expands and draws into its blind terminal respiratory chambers a mixture of fresh and residual air. The residual air greatly dilutes the oxygen which comes in contact with the absorbing blood vessels, and also prevents the carbon dioxide from being expired directly. In birds the lung is a network of anastomosing tubes which are not expansile. Fresh air is drawn through these tubes by the expansion of the air sacs, which are non-respiratory terminal prolongations of the lung. The lung of the bird may, in a sense, be compared with the respiratory bronchioles of mammals, the mammalian alveoli corresponding with the avian air sacs. Thus the lung of birds is peculiarly adapted for the rapid oxidation correlated with the requirements of flight and with a high body temperature. Other additions of this sort contribute to the value of this edition.

L. W. WILLIAMS.

(No. 492 was issued January 23, 1908.)